

REMARKS

In accordance with the foregoing, claims 1-4, 6-36, and 38-66 are pending and under consideration. Claims 1, 3, 33, 35 and 65 have been amended. Claims 5 and 37 have been cancelled without prejudice or disclaimer. New claim 66 has been added. Support for the amendments to the claims may be found in the claims as originally filed.

The claims are submitted to have been allowable over the cited references in the absence of substantive amendment, as evidenced by new claim 66. The amendments to the claims are therefore submitted to be in the interest of compact prosecution only and *not for any reason of patentability*. Reconsideration is requested based on the foregoing amendment and the following remarks.

Claim Rejections - 35 U.S.C. § 112:

The claims were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The claims were amended to make them more definite. Withdrawal of the rejection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 102:

Claims 1, 2, 33, and 34 were rejected under 35 U.S.C. § 102(e) as anticipated by Fuh et al., US 6,609,154 (hereinafter "Fuh"). The rejection is traversed to the extent it would apply to the claims as amended.

Claim 1 recites,

"an illegal pattern database which stores patterns of illegal accesses to the server."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as recited in claim 1. In Fuh, rather, as described at column 9, lines 51-67,

Access control lists filter packets and can prevent certain packets from entering or exiting a network. Each ACL is a list of information that firewall router 210 may use to determine whether packets arriving at or sent from a particular interface may be communicated within or outside the firewall router. For example, in an embodiment, input ACL 424 may comprise a list of IP addresses and types of allowable client protocols. Assume that firewall router 210 receives an inbound packet from client 306 at external interface 420 that is intended for target server 222. If the IP address of client 306 is not stored in input ACL 424, then firewall router 210 will not forward the packet further within the circuitry or software of the

firewall router. Output ACL 426 similarly controls the delivery of packets from firewall router 210 to resources located outside external interface 420. Input ACL 428 and output ACL 430 govern packet flow to or from internal interface 422.

Thus, input ACL 424 maintains a list of IP addresses and types of *allowable* client protocols. Allowable is not illegal. This is to be contrasted with claim 1, in which patterns of illegal accesses to the server are stored in an illegal pattern database.

Claim 1 recites further,

"a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as recited in claim 1.

Claim 1 recites further,

"a pattern determination unit which determines whether each access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, the pattern determination unit producing a determination result."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern determination unit which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, as recited in claim 1.

Finally, claim 1 recites,

"a transmission unit which controls transmission of the access request based on determination result of the pattern determination unit so as to transmit the access request to the

server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal."

Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as discussed above. Since Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, Fuh can't teach, disclose, or suggest a transmission unit which controls transmission of the access request based on determination result of the pattern determination unit, as recited in claim 1. Claim 1 is submitted to be allowable. Withdrawal of the rejection of claim 1 is earnestly solicited.

Claim 2 depends from claim 1 and adds further distinguishing elements. Claim 2 is thus also submitted to be allowable. Withdrawal of the rejection of claim 2 is also earnestly solicited.

Claims 33 and 34:

Claim 33 recites,

"a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule, as recited in claim 33.

Claim 33 recites further,

"a pattern determination unit which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores

patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern determination unit which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, as recited in claim 33.

Claim 33 recites further,

"a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step, as recited in claim 33.

Finally, claim 33 recites,

"a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal."

Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, Fuh can't teach, disclose, or suggest a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, as recited in claim 33. Claim 33 is submitted to be allowable. Withdrawal of the rejection of claim 33 is

earnestly solicited.

Claim 34 depends from claim 33 and adds further distinguishing elements. Claim 34 is thus also submitted to be allowable. Withdrawal of the rejection of claim 34 is also earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 3, 4, 6-19, 26-30, 35, 36, 38-47, 48-51, 58-62, and 65 were rejected under 35 U.S.C. § 103 as being unpatentable over Fuh in view of Carter et al. US 2003/0051026 (hereinafter "Carter"). The rejection is traversed to the extent it might apply to the claims as amended. Reconsideration is earnestly solicited.

Claims 3, 4, 6-19 and 26-30 depend from claim 1 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 3, 4, 6-19 and 26-30.

Furthermore, Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 3, 4, 6-19 and 26-30.

Finally, Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as discussed above with respect to the rejection of claim 1. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 3, 4, 6-19 and 26-30. Thus, even if Fuh and Carter were combined as proposed in the Office Action, the claimed invention would not result. Claims 3, 4, 6-19 and 26-30 are submitted to be allowable. Withdrawal of the rejection of claims 3, 4, 6-19 and 26-30 is earnestly solicited.

Finally, the Office Action provides no motivation or suggestion to combine the teachings of Fuh and Carter as required by 35 U.S.C. § 103(a) and the M.P.E.P. §706.02(j)(D), beyond an assertion that "(o)ne of ordinary skill in the art at the time of the invention would have been motivated to make the above mentioned modifications for the reasons discussed in Carter, Paragraph [0005]".

In paragraph [0005], however, Carter discusses only a knowledge base, and declares wistfully that such a knowledge base should “respond to and learn from new events.” That’s nice, but Carter fails to mention any reason at all to include a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as recited in claim 1. Thus, even if persons of ordinary skill in the art would have been motivated by paragraph [0005] of Carter at the time of the invention, there’s no reason to believe the claimed invention would be at all the result. Claims 3, 4, 6-19 and 26-30 are thus also submitted to be allowable. Withdrawal of the rejection of claims 3, 4, 6-19 and 26-30 is earnestly solicited.

Claims 35, 36, 38-47, 48-51, and 58-62:

Claims 35, 36, 38-47, 48-51, and 58-62 depend from claim 33 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule, as discussed above with respect to the rejection of claim 33. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 35, 36, 38-47, 48-51, and 58-62.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination unit which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 35, 36, 38-47, 48-51, and 58-62.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 35, 36, 38-47, 48-51, and 58-62.

Finally, Fuh neither teaches, discloses, nor suggests a transmission controlling step of controlling transmission of the access request based on determination result of the pattern

determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal, as discussed above with respect to the rejection of claim 33. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claims 35, 36, 38-47, 48-51, and 58-62. Thus, even if Fuh and Carter were combined as proposed in the Office Action, the claimed invention would not result. Claims 35, 36, 38-47, 48-51, and 58-62 are submitted to be allowable. Withdrawal of the rejection of claims 35, 36, 38-47, 48-51, and 58-62 is earnestly solicited.

Finally, the Office Action provides no motivation or suggestion to combine the teachings of Fuh and Carter as required by 35 U.S.C. § 103(a) and the M.P.E.P. §706.02(j)(D), beyond an assertion that “(o)ne of ordinary skill in the art at the time of the invention would have been motivated to make the above mentioned modifications for the reasons discussed in Carter, Paragraph [0005]”, as discussed above.

Claims 65:

Claim 65 recites,

“a pattern estimation step of referring to an illegal pattern database which stores patterns of illegal accesses to the server, and estimating legality of an access request based on the illegal access patterns referred to and on a predetermined pattern estimation rule.”

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can’t teach, disclose, or suggest a pattern estimation step of referring to an illegal pattern database which stores patterns of illegal accesses to the server, and estimating legality of an access request based on the illegal access patterns referred to and on a predetermined pattern estimation rule, as recited in claim 65. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claim 65.

Claim 65 recites further,

“a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule.”

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule, as recited in claim 65. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claim 65.

Finally, claim 65 recites,

"a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal."

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Since Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, Fuh can't teach, disclose, or suggest a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal, as recited in claim 65. Carter does not either, and thus cannot make up for this deficiency of Fuh with respect to claim 65. Claim 65 is submitted to be allowable. Withdrawal of the rejection of claim 65 is earnestly solicited.

Claims 31, 32, 63, and 64:

Claims 31, 32, 63, and 64 were rejected under 35 U.S.C. § 103 as being unpatentable over Fuh in view of Carter, and further in view of Cahill et al. US 6,535,855 (hereinafter "Cahill"). The rejection is traversed to the extent it might apply to the claims as amended. Reconsideration is earnestly solicited.

Claims 31 and 32 depend from claim 1 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 31 and 32.

Furthermore, Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 31 and 32.

Finally, Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as discussed above with respect to the rejection of claim 1. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 31 and 32. Thus, even if Fuh, Carter and Cahill were combined as proposed in the Office Action, the claimed invention would not result. Claims 31 and 32 are submitted to be allowable. Withdrawal of the rejection of claims 31 and 32 is earnestly solicited.

Finally, the Office Action provides no motivation or suggestion to combine the teachings of Fuh, Carter and Cahill as required by 35 U.S.C. § 103(a) and the M.P.E.P. §706.02(j)(D), beyond an assertion that “(o)ne of ordinary skill in the art at the time of the invention would have been motivated to make the above mentioned modifications for the reasons discussed in Carter, Paragraph [0026]”.

In paragraph [0026], however, Carter merely opines that monitoring and protecting network communication over the Internet is a major purpose of network surveillance and security systems. Network surveillance and security systems are nice, but Carter fails to mention any reason at all to include a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as recited in claim 1. Thus, even if persons of ordinary skill in the art would have been motivated by paragraph [0026] of Carter at the time of the invention, there's no reason to believe the claimed invention would be at all the result. Claims 31 and 32 are thus also submitted to be allowable. Withdrawal of the rejection of claims 31 and 32 is earnestly solicited.

Claims 63 and 64:

Claims 63 and 64 depend from claim 33 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 63 and 64.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination unit which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 63 and 64.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 63 and 64.

Finally, Fuh neither teaches, discloses, nor suggests a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal, as discussed above with respect to the rejection of claim 33. Neither Carter nor Cahill do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 63 and 64. Thus, even if Fuh, Carter and Cahill were combined as proposed in the Office Action, the claimed invention would not result. Claims 63 and 64 are submitted to be allowable. Withdrawal of the rejection of claims 63 and 64 is earnestly solicited.

Finally, the Office Action provides no motivation or suggestion to combine the teachings of Fuh, Carter and Cahill as required by 35 U.S.C. § 103(a) and the M.P.E.P. §706.02(j)(D), beyond an assertion that "(o)ne of ordinary skill in the art at the time of the invention would have been motivated to make the above mentioned modifications for the reasons discussed in Carter,

Paragraph [0026]", as discussed above.

Claims 22-25 and 54-57:

Claims 22-25 and 54-57 were rejected under 35 U.S.C. § 103 as being unpatentable over Fuh in view of Carter, and further in view of Kashani et al. US 2002/0165894 (hereinafter "Kashani"). The rejection is traversed to the extent it might apply to the claims as amended. Reconsideration is earnestly solicited.

Claims 22-25 depend from claim 1 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Neither Carter nor Kashani do either, and thus cannot make up for this deficiency of Fuh with respect to claims 22-25.

Furthermore, Fuh neither teaches, discloses, nor suggests an illegal pattern database which stores patterns of illegal accesses to the server, as discussed above with respect to the rejection of claim 1. Neither Carter nor Kashani do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 22-25.

Finally, Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database, as discussed above with respect to the rejection of claim 1. Neither Carter nor Kashani do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 22-25. Thus, even if Fuh, Carter and Kashani were combined as proposed in the Office Action, the claimed invention would not result. Claims 22-25 are submitted to be allowable. Withdrawal of the rejection of claims 22-25 is earnestly solicited.

Claims 54-57:

Claims 54-57 depend from claim 33 and add further distinguishing elements.

Fuh neither teaches, discloses, nor suggests a pattern estimation unit which estimates legality of an access request based on the illegal access patterns stored in the illegal pattern database and on a predetermined pattern estimation rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Kashani do either, and thus cannot make up for this deficiency of Fuh with respect to claims 54-57.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination unit

which determines whether each of the access request is to be transmitted to the server based on the estimation by the pattern estimation unit and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Kashani do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 54-57.

Furthermore, Fuh neither teaches, discloses, nor suggests a pattern determination step of determining whether the access request is to be transmitted to the server based on an estimation result at the pattern estimation step and on a predetermined pattern determination rule, as discussed above with respect to the rejection of claim 33. Neither Carter nor Kashani do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 54-57.

Finally, Fuh neither teaches, discloses, nor suggests a transmission controlling step of controlling transmission of the access request based on determination result of the pattern determination step so as to transmit the access request to the server when the access request is estimated to be legal, and so as to reject transmission of the access request to the server and so as to abandon the request when the access request is estimated to be illegal, as discussed above with respect to the rejection of claim 33. Neither Carter nor Kashani do not either, and thus cannot make up for this deficiency of Fuh with respect to claims 54-57. Thus, even if Fuh, Carter and Kashani were combined as proposed in the Office Action, the claimed invention would not result. Claims 54-57 are submitted to be allowable. Withdrawal of the rejection of claims 54-57 is earnestly solicited.

New claim 66:

None of the cited references teach, disclose, or suggest storing a pattern of illegal accesses to a server in an illegal pattern database, or estimating a legality of the access request based on the illegal access pattern stored in the illegal pattern database and on a predetermined pattern estimation rule, or determining whether the access request is to be transmitted to the server based on the estimate of the legality of the access request. Claim 66 is thus believed to be allowable.

Conclusion:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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